C3

42. (Amended) A method of making an array of oligonucleotides, which comprises attaching oligonucleotides to a surface of a support, the oligonucleotides having different predetermined sequences and the oligonucleotides being attached at between 72 and 1.1×10^{12} different known locations on the surface of the support.

C4

78. (Amended) The method of claim 63, 64 or 68, wherein hybridizations are detected by means of a device having a resolution of between 1 μm and 25 μm.

C5

SUB D1

95. (Amended) A method for analysing multiple sequence variants in multiple polynucleotides, which comprises:

a) laying down stripes of oligonucleotides corresponding to each sequence variant on the surface of a solid support,

b) applying the polynucleotides to the surface under hybridisation conditions in stripes orthogonal to those of the oligonucleotides, and

c) observing hybridisation at a site of intersection as an indication of the presence of a variant sequence in the polynucleotide,

wherein the stripes of oligonucleotides have a width of 1 mm or less and the polynucleotides are applied in orthogonal stripes 5 mm wide.

C6

97. (Amended) A kit for analysing a polynucleotide comprising: an array of oligonucleotides comprising a support having a surface to which the oligonucleotides are attached, wherein oligonucleotides having different nucleotide sequences are attached at between 72 and 1.1×10^{12} different known locations on the surface of the support; apparatus for hybridisation of the polynucleotide to the array; and a scanner for detecting hybridisation.